From: Cook, Brenda
To: Brown, Michelle
Subject: Fw: Norphlet

Date: Tuesday, January 22, 2013 12:18:55 PM
Attachments: NORPLET SOILS RE-EXT AND 4ML TO 1ML.xlsx

Brenda Nixon Cook

Region 6 NPL Coordinator

1445 Ross Avenue

Dallas, Texas 75202

214-665-7436

Consider being a bone marrow donor!! Join the National Donor Marrow Registry!! For more information visit

www.marrow.org

----- Forwarded by Brenda Cook/R6/USEPA/US on 01/22/2013 12:18 PM -----

From: Diane Gregg/R6/USEPA/US

To: Diane Gregg/R6/USEPA/US@EPA

Cc: Brenda Cook/R6/USEPA/US@EPA, Christy Warren/R6/USEPA/US@EPA, k.warr@westonsolutions.com

Date: 01/22/2013 12:01 PM

Subject: Re: Norphlet

I am so sorry that I did not attach the correct file. Short version is our files are now on a server in Dallas and it was taking to long to save. I had two named the same. This file should make a whole lot more sense.

:)

From: Diane Gregg/R6/USEPA/US

To: Brenda Cook/R6/USEPA/US@EPA

Cc: Christy Warren/R6/USEPA/US@EPA

Date: 01/17/2013 06:53 AM

Subject: Norphlet

## Hi Brenda.

The soil data for Norphlet is attached to this email. Please note the following important information:

- -The data are in two worksheets with extraction batch numbers listed on each tab.
- -I did not keep the raw data in this file as I did the previous two files I sent because of the file size. I can send it separately if it is of interest to you.
- -Several samples were re-extracted because the wrong amount of surrogate was added (B2K1402 are samples reported from original GC/QQQ extraction; B2L1304 are the re-extractions).
- -After analyzing all of the samples in the original batch, we found many compounds would not be reportable (>RL) as well as the problem with the incorrect amount of surrogate for some samples.
- -In order to report more analytes, we concentrated the remainder of the 5ml extract and reanalyzed (4ml of extract concentrated to 1ml). These results are in worksheet labeled B2K1402.
- -For the re-extractions we used more sample weight, kept the final volume at 5ml, and reanalyzed. These results are in worksheet labeled B2L1304.
- -Many surrogates recovered low in the samples we concentrated to 1ml. This is because of the difficult matrix (oil) and trying to concentrate to the lower volume of 1ml.
- -Most of the surrogates for the re-extractions are acceptable.
- -I did not add the recovery limits for the BS and MS/MSD/RPD and mark the ones that are out. It looks like most of the recoveries are low and we are already considering the results to be low biased. This will be rectified on the final report.
- -Some unknown phenomenon affected the chromatography of the blanks and BSs (we have not figured out what yet). This increased the RT of the peak for some analytes to be partially outside the SIM window (window where daughter ion is collected). This is why you see low recoveries for the BSs especially for the late eluting PAHs (approximately 1/3 to 1/5 of the end of the peak was cut off). This did not happen to the samples and matrix spikes. All of the peaks eluted within the SIM window.
- -The source samples for the MS/MSD have concentrations below the RL. They are shaded rather than listed as "<RL". This is so the formula for calculating the recoveries will include source concentrations < RL as our LIMS does.
- -I also reported results <RL for the background sample (1208013-02) so that you could compare the results more easily. These are also shaded.
- -As before, all results are estimated with a low bias (outside holding time and for low QC failures).

We will send the data through our LIMS and provide the final report that you are used to seeing. This may be several more weeks. Please note the final digit of the numbers may change a little for the QC in the final report since I used rounded numbers in this spreadsheet. Our LIMS uses unrounded numbers. The results <RL will not appear on the final report for the source samples or for the background sample. Results will also include qualifiers and show all the QC failures.

We also still have plans to improve the method. We have been in constant communication with the instrument manufacturer and they are going to provide hardware and software upgrades to our instrument that are needed. They have also put together a new group of transitions (or daughter ions) that will hopefully be more selective in the oil matrix. We hope for these upgrades to take place the week of January 28<sup>th</sup>. After we have tested the upgrades, we can talk about how we need to proceed for Norphlet in the future, if there is more work you would like for us to do.

Please let me know if you have any questions.